

PATENT COOPERATION TREATY

From the
INTERNATIONAL SEARCHING AUTHORITY

PCT

To:

see form PCT/ISA/220

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY (PCT Rule 43bis.1)

Date of mailing
(day/month/year) see form PCT/ISA/210 (second sheet)

Applicant's or agent's file reference
see form PCT/ISA/220

FOR FURTHER ACTION
See paragraph 2 below

International application No.
PCT/GB2004/004161

International filing date (day/month/year)
29.09.2004

Priority date (day/month/year)
30.09.2003

International Patent Classification (IPC) or both national classification and IPC
B41M5/30

Applicant
ARJO WIGGINS LIMITED

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☒ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

2. **FURTHER ACTION**

If a demand for international preliminary examination is made, this opinion will usually be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA"). However, this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of three months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA:



European Patent Office - P.B. 5818 Patentlaan 2
NL-2280 HV Rijswijk - Pays Bas
Tel. +31 70 340 - 2040 Tx: 31 651 epo nl
Fax: +31 70 340 - 3016

Authorized Officer

Whelan, N

Telephone No. +31 70 340-3910



**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

101573887

International application No.
PCT/GB2004/004161

IAP20 Rec'd PCTO 29 MAR 2006

Box No. I Basis of the opinion

1. With regard to the **language**, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.
 - ☐ This opinion has been established on the basis of a translation from the original language into the following language , which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).
2. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
 - a. type of material:
 - ☐ a sequence listing
 - ☐ table(s) related to the sequence listing
 - b. format of material:
 - ☐ in written format
 - ☐ in computer readable form
 - c. time of filing/furnishing:
 - ☐ contained in the international application as filed.
 - ☐ filed together with the international application in computer readable form.
 - ☐ furnished subsequently to this Authority for the purposes of search.
3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.
PCT/GB2004/004161

Box No. II Priority

1. ☒ The following document has not been furnished:

☒ copy of the earlier application whose priority has been claimed (Rule 43*bis*.1 and 66.7(a)).

☐ translation of the earlier application whose priority has been claimed (Rule 43*bis*.1 and 66.7(b)).

Consequently it has not been possible to consider the validity of the priority claim. This opinion has nevertheless been established on the assumption that the relevant date is the claimed priority date.

2. ☐ This opinion has been established as if no priority had been claimed due to the fact that the priority claim has been found invalid (Rules 43*bis*.1 and 64.1). Thus for the purposes of this opinion, the international filing date indicated above is considered to be the relevant date.

3. ☐ It has not been possible to consider the validity of the priority claim because a copy of the priority document was not available to the ISA at the time that the search was conducted (Rule 17.1). This opinion has nevertheless been established on the assumption that the relevant date is the claimed priority date.

4. Additional observations, if necessary:

Box No. V Reasoned statement under Rule 43*bis*.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes: Claims	2-5,14-17,23-24
	No: Claims	1,6-13,18-22,25-26
Inventive step (IS)	Yes: Claims	
	No: Claims	1-26
Industrial applicability (IA)	Yes: Claims	1-26
	No: Claims	

2. Citations and explanations

see separate sheet

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING
AUTHORITY (SEPARATE SHEET)**

International application No.

PCT/GB2004/004161

Re Item V**IAP20 Rec'd PCT/PTO 29 MAR 2006****Reasoned statement with regard to novelty, inventive step or industrial
applicability; citations and explanations supporting such statement**

Reference is made to the following documents:

- D1: WO 02/064376 A
- D2: PATENT ABSTRACTS OF JAPAN vol. 0131, no. 77 (M-818), 26 April 1989
(1989-04-26) & JP 1 008087 A
- D3: US-A-5 134 189

1. The subject-matter of independent claims 1,13,25,26 does not appear to be novel
Art 33(2) PCT for the following reasons:

The document D1 describes a method of preparing a printable sheet comprising providing a substrate comprising a base sheet which is a clay coated paper (page 7, lines 1-4) and using flexographic (page 5, line 3-5) technique, printing onto the coated surface a thermal composition which comprises a colour former, a colour developer and a sensitizer which is dimethylterephthalate (page 2, lines 13-21). The composition also comprises a kaolin or calcium carbonate (page 4, last §) as pigment. The expression ink in present claims is not regarded to imply anything else then a composition.

D1 also discloses the thermally printable sheet obtainable by printing as defined above with a composition or ink as defined above and therewith anticipates the subject-matter of present claim 13.

Claims 25 and 26 are directed to a method of printing said ink upon said coated surface (as defined above). The features of present claims 25 and 26 are therefore also disclosed by D1 (see passages above). The statement of a problem (i.e. to reduce...) in present claims 25 and 26 is not regarded as an additional technical feature of these claims.

2. The document D2 describes a method comprising the features of present claim 1 (see abstract) except that the ink does seem to comprise specifically DMT as sensitizer.

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING
AUTHORITY (SEPARATE SHEET)**

International application No.

PCT/GB2004/004161

The objective problem may therefore be regarded as to choose a sensitizer in a thermal ink.

Such inks comprising DMT as sensitizer are however well known and merely constitute an obvious possibility among obvious alternatives from which the skilled man would choose.

Hence this selection is to be regarded as obvious in particular in view of D3 which is also concerned with storage stability as present application, see D3 column 2, lines 44-61 and which shows the composition of the ink as defined in present claims, see D3 column 2, lines 23-44, column 3, lines 43-50, column 6, line 23 and column 6, lines 15-16.

The additional features of the dependent claims 2-12 and 14-24 are also either disclosed in D1- D3 or are regarded as trivial features which do not seem to provide for any additional unexpected effect.